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Mount Pleasant, Wisconsin 53403
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17 August 2015

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-9J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois Monthly Progress Report for June 2015, Revision 1

Dear Mr. Nordine:

Enclosed please find the Monthly Progress Report for the Central Wire facility located in Union, Illinois for the month of June 2015 revised to incorporate EPA comments via letter dated July 23, 2015.

The corrected eDMR for the groundwater pump and treat facility and the laboratory analytical reports, which include the effluent data used in the eDMR for June 2015 and the data from the semiannual groundwater monitoring well and residential well sampling event, are also attached to this report.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

Autumnwood ESH Consultants, LLC

John W. Thorsen, P.E.

JWT:jt

encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Thomas Hanewald	Central Wire
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

MONTHLY PROGRESS REPORT
Central Wire Union, Illinois Site
June 2015

1. **Progress Made This Reporting Period** – This reporting period Central Wire continued the operation and maintenance of the groundwater extraction and treatment system. Central Wire treated an average of 758,000 gallons per day with a maximum daily flow of 766,000 gallons per day and met effluent limitations for pH, 1,1,1-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for June 2015 is attached to this report.

The laboratory analytical report for the pump and treat effluent noted that the groundwater pump & treat effluent samples arrived at the lab on June 12, 2015 at -1.4° C.

The Ex. 6 Personal Privacy (PP) well ran for a total of 35 hours from May 26 to July 1, 2015. The Ex. 6 Personal Privacy (PP) pump ran for one hour during this period.

Table 1
Summary of 2015 Irrigation Pumping Hours per Week at Ex. 6 Personal Privacy (PP)
(June 1 through July 1, 2015)

Date of Hour Meter Reading	Ex. 6 Personal Privacy (PP)			
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped
5/26/2015	5459	0	3282	0
6/1/2015	5459	0	3287	5
6/8/2015	5459	0	3302	15
6/15/2015	5459	0	3308	6
6/22/2015	5459	0	3312	4
6/29/2015	5459	0	3315	3
7/1/2015	5960	1	3317	2
Totals		1		35

The groundwater level monitoring data from downgradient monitoring well DGW-2I for June 2014; and precipitation, groundwater level and irrigation well pumping over the month have been graphed / plotted and are attached to this report. In June, the groundwater elevation varied between a high of 816.406 feet above MSL on June 19, 2015 to a low of 814.846 on June 12, 2015 resulting in a 1.56 foot variation over the month.

Summary of Validated Data and Results – The monthly effluent sampling took place on June 11, 2015. The permit limitations and analytical results are shown below.

Table 2
Central Wire Union Illinois Pump & Treat Discharge Analytical Results

Parameter	Effluent Limitation (Daily Maximum), mg/L	June 2015 Analytical Results, mg/L
1,1,1-Trichloroethane	20	0.00066 J
Tetrachloroethene	20	0.00084 J
Trichloroethene	20	<0.00019

The "J" in Table 2 denotes that the result is less than the Reporting Limit, but greater than or equal to the Method Detection Limit and the concentration is an approximate value. The June NPDES analytical report is attached to this Monthly Progress Report.

In addition, the spring semiannual RCRA CMI groundwater and residential well sampling event was conducted on June 10 & 11, 2015. The results / trends are summarized below. The historical data, plots (of the data, Figures 1 through 11) and laboratory report are attached to this report. The locations of the monitoring wells and the residential wells are provided on Figure 12. The table in Attachment 1 provides a crosswalk between the residential well owner's name, which is on Figure 12 and the address, which is in the analytical report for the residential wells. The well stabilization field data is included as Table 3.

- **MW (Monitoring Well) 2** - No Environmental Protection Agency (EPA) Maximum Contaminant Limits (MCLs) have been exceeded since December 2007, see Figure 1.
- **MW-4** - Tetrachloroethene (PCE) has been exceeded since monitoring began in 1995 and since 2010 has trended downward from 70 micrograms per liter (μg/L) in December 2010 to 12 μg/L in June 2015. See Figure 2. The Trichloroethene (TCE) MCL was last exceeded in October 2014, but other than that occurrence, it has tested below the MCL since December 2012.
- **MW-5** - The PCE MCL has been exceeded since monitoring began in 1995 and has trended downward from 650 μg/L in 1995 to the 100s in the 2000s and has been less than 100 μg/L since June 2013, see Figure 3. TCE, 1,1,1-Trichloroethane (TCA) and Dichloroethene (DCE) MCLs were last exceeded in the 2003 – 2005 time frame. MW-5D exceeds the MCL for TCE and was found at 13 μg/L in June 2015. No other MCLs have been exceeded since PCE was found at 49 μg/L in June 2005.
- **MW-5D** – TCE increased rapidly from 1995 to 2002 and has generally trended downward since then with the five latest reading ranging from 13 – 18 μg/L, see Figure 4.
- **MW-6** - Has only exceeded the PCE MCL and has been slightly below the MCL of 5 ug/L since December 2012, see Figure 5.

- **MW-7-** Regularly exceeds the MCL for PCE (the most recent result was 51 μg/L), see Figure 6. PCE has been less than 100 μg/L since October 2008. The DCE MCL was last exceeded in December 2009, but other than that isolated occurrence, has been found at levels below the MCL since December 2003. The TCE MCL was last exceeded in December 2012.
- **MW-8** - Has regularly exceeded the PCE and TCE MCLs since testing began in 1995, see Figure 7. PCE has come down from 200 see Figure 7 μg/L in 2005 to a range of 61 to 72 ug/L since December 2011. TCE levels have come down from a high of 34 μg/L in June 1995 to the June 2015 value of 6.7 μg/L. Other than the 13 μg/L found on October 2014, values have been found at less than 10 μg/L since December 2011.
- **MW-9** - Has not exceeded any MCL since April 2002 when it exceeded the PCE with a value of 12 μg/L, see Figure 8. There have only been three detections since then.
- **MW-HBR** - Only exceeds the MCL for PCE which it has done since monitoring began in 1995. However it has generally trended downward from a high of 130 μg/L to the current lowest value of 40 μg/L, see Figure 9.
- **DGW-1** is a three well nest – shallow (S), Intermediate (I) and Deep (D).
    - No MCLs have been exceeded in **DGW-1S.**
    - **DGW-1I** has exceeded MCLs for DCE, TCE, PCE, TCA and 1,2-Dichloroethane (DCA), see Figure 10. The PCE MCL has not been exceeded since 2002. The DCA MCL has not been exceeded since 2005. The TCA was below the MCL in the December 2013 and June 2014 samples, spiked up to 420 μg/L in October 2014, and was at 310 μg/L in the June 2014 sample. DCE and TCE were found in June 2015 at 85 and 41 μg/L, respectively, with no apparent trend.
    - **DGW-1D** has exceeded MCLs for DCA, DCE, TCE and Vinyl Chloride (VC), see Figure 11. The Vinyl Chloride (VC) MCL had been exceeded in the three sampling events between June 2013 and June 2014, but has been below the MCL in the last two sampling events.
- **DGW-2** is also a three well nest (shallow, intermediate and deep) that has been sampled since 2012. There have been no MCL exceedances in these three wells.

Seven residential wells and one irrigation well were sampled in the June semiannual RCRA sampling event. There were no detections of any VOCs that can be detected by EPA Method 8260B, including all of the chemicals of concern at Central Wire.

The field stabilization data for the monitoring and residential well sampling is attached to this Monthly Progress report as Table 3-1. Per EPA comments we are also attaching a copy of the November 2002 Groundwater Monitoring Plan. This plan, in Section 3.1.2, Purging Procedures, item 5 calls for recording field parameters "~2 minutes or ~0.5 well volumes or more apart..." In addition, EPA requested Central Wire to verify the dissolved oxygen (D.O.) stabilization criteria. The Groundwater Monitoring Plan calls for three

consecutive readings where the D.O. is +/- 0.2 mg/L. In reviewing Table 3, Central Wire has noted that there are nine instances where there were two but not three consecutive readings that were meeting this criteria. We will share the Groundwater Monitoring Plan with our sampling subcontractor, emphasizing the need for three consecutive readings within the indicator parameter guidance shown on page 3-2 of the Groundwater Monitoring Plan. Lastly, EPA requested Central Wire to review and properly format Table 3 which we have done.

This report also had environmental analytical results for the North Pond and South Pond. These ponds are Illinois EPA regulated seepage ponds for Central Wire's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and storm water. The analytical report for these samples is attached to this Progress Report.

2. **Upcoming Events/Activities Planned** – Central Wire will continue to operate the existing remediation systems. Effluent samples will be collected and analyzed as required in our NPDES permit.
3. **Anticipated Problem Areas and Recommended Solutions** – None.
4. **Key Personnel Changes** – None.
5. **Target and Actual Completion Dates** – This project has not deviated from the project schedule.

ATTACHMENT 1

Crosswalk between Residential Well Owner's Names and Addresses

Slais	17214 Highbridge Rd.
Logothetti	18010 Rt. 176
Rusho	18017 Rt. 176
South Branch Nursery	18101 Rt. 176
Turner	18216 Rt. 176
Sickles	18314 Rt. 176
Standish	18408 Rt. 176
Koi Pond	18516 Rt. 176
Moss	18603 Rt. 176